

### **REMARKS**

Favorable reconsideration of this application is respectfully requested. The status of the Claims currently pending is as follows: Claims 1-14 and 169 have been rejected; Claim 15 has been objected to; and Claims 16-35 and 37-168 have been withdrawn from consideration. The paragraph numbers below refer to the paragraph numbers in United States Published Patent Application No. 2004-0233150.

The Examiner is thanked for indicating that claim15 is allowable as set forth in Sections 7, 8 and 9 of the Office Action.

**A. The Current Office Action in General Fails to Comply with the Requirements of 37 C.F.R. 104(c)(2).**

**1. The current Office Action again forces Applicants to improperly speculate as to the basis for the rejections in the Office Action.**

In numerous instances, the current Office Action cites column and line numbers and drawing figures without specifically identifying which particular element of the cited references the Examiner believes is equivalent to a feature of the claimed invention (see for example the run-on sentence/paragraph bridging pages 3-4 of the Office Action, the second full paragraph of page 4, the fourth full paragraph of page 4, the first paragraph of page 5, *etc.*). The current Office Action never quotes specific text of any of the cited references or explains how the references teach that the various cited sections of the references are connected to each other.

This is also not the first time that Applicants have had to comment on such deficiencies in an Office Action during the prosecution of the present application. In their May 19, 2005 Amendment, Applicants pointed out similar deficiencies in the Office Action dated April 28, 2005 (See Section A, pp. 28-29; and Section B, pp. 31-34). Applicants also pointed out similar deficiencies in their August 11, 2005 Request for Pre-Appeal Brief Review (Request for Pre-Appeal Brief Review). In addition, Applicants' representative pointed out similar deficiencies during the Examiner Interview on October

13, 2005. The Examiner has also consistently refused to remedy this pattern of deficiencies or, in many cases, even address this pattern of deficiencies.

Unfortunately, the current Office Action continues this vexatious pattern of presenting deficient rejections, and once again forcing Applicants to improperly speculate as to the basis for the rejections in the current Office Action. One omission of the type noted above would make the current Office Action *prima facie* improper under 37 C.F.R. 1.104(c)(2). But the large number of these omissions noted by Applicants in the current Office Action plainly establishes a complete and egregious disregard of 37 C.F.R. 1.104(c)(2) by the Examiner, and puts into question whether the Examiner feels bound by the dictates of 37 C.F.R. 1.104 in general.

2. **The grammatical errors in the current Office Action are so numerous and confusing as to implicitly violate the requirement of 37 C.F.R. 1.104(c)(2) that the “pertinence of each reference be clearly explained.”**

There are numerous grammatical errors in the current Office Action. In fact, these grammatical errors are so numerous and confusing in so many instances as to implicitly, if not explicitly, violate the requirement of 37 C.F.R. 1.104(c)(2) that the “pertinence . . . of each reference be *clearly explained* (emphasis added).” Some representative and egregious examples of this problem are noted as follows:

- a. The rejection set forth in Section 4 of the Office Action (see pages. 3-4) includes a single confusing run-on sentence that is almost a full page long.
- b. The rejection set forth in Sections 3 and 4 of the Office Action (see page. 4) includes the following terse, cryptic sentence: “Regarding Claim 2, Scheffer teaches display device [sic]; comprising [sic] recursive feedback is based on an output bit (see flowchart 11, Col. 17, Line 22 to Col. 18, Line 12, flowchart 14, Col. 20, Line 57 to Col. 21, Line 2”.

- c. The rejection set forth in Section 5 of the Office Action (see page 7) includes the following confusing run-on sentence: “In order to achieve applicant’s claimed invention one in the ordinary skill in the art would be motivated to combine Willis teaching of LCOS light modulating element driving [sic] and Schafer et al. ‘s [sic] teaching of recursive feedback circuitry with Dallas et al. teaching of LCOS with silicon backplane able to have various circuitry such that [sic] Shafer’s [sic] recursive feedback circuitry could be implemented on Dallas silicone [sic] backplane.
- d. The rejection set forth in Section 6 of the Office Action (see page 8), includes the following confusing and cryptic sentence: “However, Willis (US 2003/0156083) teaches explicit and implicit (page 2, paragraph 18, Lines 1-3) (as defined by applicant’s specification US PG PUB 2004/02333150, paragraphs 52, 82, 11) per old and news [sic] pixel values. (figures 3, 4, page 1, paragraphs 15, 16, page 2, paragraphs 16-20).
- e. The rejection set forth in Section 6 of the Office Action (see pages 8-9) also includes the following confusing run-on sentence: “Thus it would have been obvious to one in the [sic] ordinary skill in the art at the time of invention was made to incorporate the teaching of Willis (US 2003/0156083) in to [sic] the teaching of Willis (US 2004/0036707 A1) modified by Scheffer et al. to be able to implement on Willis (US 2003/0156083) teaching of explicit and implicit per applicant’s specification (figures 3,4, page 1, paragraphs 15,16, page 2, paragraphs 16-20); (of Schafer’s [sic] et al.’s) to control pulse width (Col. 25, Line 52 to Col. 26 Line 46) using recursive feedback circuitry (figure 6, Col. 10, Lines 13-18, 57-61).

As can be seen from these representative examples, the grammatical errors in the Office Action affect all of the rejections in the current Office Action, and make it impossible or nearly impossible for Applicants to intelligently respond these rejections.

3. **Because the rejections formulated in the current Office Action generally fail to comply with the requirements of 37 C.F.R. 104(c)(2), the rejections in the Office Action should be withdrawn.**

For the above reasons, the rejections of claims 1-14 and 169 set forth in the current Office Action fail to comply with the requirements of 37 C.F.R. 104(c)(2). Such failure is so complete and egregious that Applicants cannot reasonably understand how the cited references are being applied in these rejections, and more importantly how to appropriately or intelligently respond to these rejections. Accordingly, the rejections of claims 1-14 and 169 in the current Office Action should be withdrawn.

**B. In General, the Rejections in the Current Office Action are Deficient Because the Examiner Improperly Ignores the Applicants' Definitions of Claim Terms.**

1. **The current Office Action shows no evidence that the Examiner has used the definitions of terms in Applicant's specification in order to interpret the scope of claims 1-14 and 169.**

While the current Office Action at page 11 alleges that "Examiner has considered the applicant's request to use applicant's specification for applicant's claimed limitations' definitions and explanations," that does not reflect what the Examiner has actually done. In the current Office Action, the *Examiner has not cited the text of a single definition of a single term used in Claims 1-14 and 169* in rejecting these claims. This failure is all the more egregious because: (1) in their August 11, 2005 Request for Pre-Appeal Brief Review, the Applicants' pointed out that the Examiner had ignored the definitions of terms in the specification in interpreting the claimed invention and (2) the Examiner specifically agreed during a Examiner Interview of October 13, 2005 to refer to these definitions when interpreting the meaning of terms in Applicants' claims.

**2. The current Office Action mischaracterizes the terms used in the claims and defined in Applicants' specification.**

In rejecting Claims 10 and 11 (see Section 6 of the Office Action), which claim the features of explicit recursive feedback and implicit recursive feedback, respectively, the current Office Action states:

Regarding Claims 10, 11, the combination of Willis (US 2004/00036707 A1) modified by Scheffer fails to teach explicit and implicit (as defined by applicant's specification US PG PUB 2004/0233150, paragraphs 52, 82, 113).

However, Willis (US 2003/0156083) teaches explicit and implicit (page 2, paragraph 18, Lines 1-13) (as defined by applicant's specification US PG PUB 2004/0233150, paragraphs 52, 82, 113) per old and news [sic] pixel values (see Office Action, p. 8).

While the current Office Action allegedly refers to Applicants' specification for the meaning of the terms "explicit recursive feedback" in Claim 10 and "implicit recursive feedback" in Claim 11, the Office Action actually quotes no text from the specification where Applicants define these two terms, and additionally mischaracterizes the meaning of these two terms. Paragraphs [0052], [0082] and [0113] of the Applicants' specification do not actually define the terms "explicit" and "implicit" *per se*. Paragraph [0052] just states that "FIG. 7 shows an SRAM bit connected to a mirror," paragraph [0082] defines the term "implicit *recursive feedback*" (emphasis added) and paragraph [0113] defines the term "explicit *recursive feedback*" (emphasis added). The current Office Action also fails to explain how the mere use of the word "explicit" in Willis (US 2003/0156083) (Willis 2003) teaches or suggests the "explicit" *recursive feedback* of Claim 10, or how the mere use of the word "implicit" in Willis 2003 teaches or suggests the "implicit" *recursive feedback* of Claim 11.

3. **Because the current Office Action uses the Examiner's own definitions instead of Applicants' definitions in the specification of these claim terms, the rejections of Claims 1-14 and 169 are *prima facie* improper and should be withdrawn.**

In prior Office Actions, the Examiner has ignored Applicants' definitions of claim terms in the specification. For reasons given above, the current Office Action provides no indication the Examiner has changed this pattern and actually relied on Applicants' definition of these claim terms. Instead, the current Office Action follows the prior pattern where the Examiner feels free to ignore Applicants' definitions of claim terms in specification and, instead, interpret Claims 1-14 and 169 using definitions of the Examiner's own devising. This failure of the Examiner to properly consider Applicants' definitions of claim terms provided in the specification is contrary to long established Federal Circuit case law precedent that an applicant is entitled to be his or her own lexicographer (see *Boss Control Inc. v. Bombardier*, 75 USPQ2d 1038, 1041 (Fed. Cir. 2005)). In fact, the Examiner's failure to follow this controlling case law makes all of the rejections of Claims 1-14 and 169 *prima facie* improper. For this reason alone, all of the rejections of Claims 1-14 and 169 should be withdrawn.

- C. **Response to Rejection of Claims 1-4, 6-8, 12, 14 and 169 under 35 U.S.C. § 103(a) as being as being unpatentable over Willis 2004 in view of Scheffer.**

At Sections 3 and 4 of the Office Action, Claims 1-4, 6-8, 12, 14 and 169 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application No. 2004-0036707 to Willis (Willis 2004) in view of U.S. Patent No. 5,585,816 to Scheffer *et al.* (Scheffer). This rejection is respectfully traversed.

1. **The combination of Scheffer with Willis 2004 is *prima facie* improper.**
  - a. **This rejection provides no appropriate basis for combining Scheffer with Willis 2004.**

This rejection is *prima facie* improper because it provides no appropriate basis for combining Scheffer with Willis 2004. As set forth in the Manual of Patent Examining Procedure (MPEP) at § 706.02(j), “To establish a *prima facie* case of obviousness . . . there must be some suggestion or motivation, *either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings* (emphasis added) . . . The teaching or suggestion to make the claimed combination and the reasonable expectation of success *must both be found in the prior art and not based on applicant’s disclosure* (emphasis added). *In re Vaeck*, 947 F.2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).”

The current Office Action attempts to justify combining Scheffer with Willis 2004 based on the following two conclusory statements:

**First Conclusory Statement**

In order to achieve applicant’s claimed invention one in the [sic] ordinary skill in the art would be motivated to combine Schafer [sic] et al. ‘s [sic] recursive swift [sic] function generator with Willis’ (2004/0036707 A1) display system to achieve more accurate gray scale for Willis’ (2004/0036707 A1) LCOS display device while displaying video rate high information content on a passive matrix LCD. (see Office Action, p. 4).

**Second Conclusory Statement**

Thus it would have been obvious to one in the [sic] ordinary skill in the art at the time of invention was made to incorporate the recursive swift [sic] function generator of Scheffer et al. in driving the display of Willis (2004/0036707 A1) to be able to control pulse width (Col. 25, Line 52 to Col. 26 Line 46) using recursive feedback control circuitry (figure 6, Col. 10, Lines 13-18, 57-61) to achieve gray scale shading a display device like LCD (Col. 25, Lines 25-30, Col. 28, Lines 25-29) and to be able to display video rate high information content on a passive matrix LCD (Col. 3, lines 7-10, Col. 4, Line 66 to col. 5, Line 6, abstract Lines 1-5) (see Office Action, p. 4).

The Second Conclusory Statement fails to properly to identify any text in Willis 2004, Scheffer or any other reference that would provide any proper motivation for combining Scheffer with Willis 2004. The First Conclusory Statement does not even attempt to cite any portion of Willis 2004, Scheffer, or any other reference in support of its allegations. As stated by the Federal Circuit in *Sibia Neurosciences Inc. v. Cadus Pharmaceutical Corp.*, 55 USPQ2d 1927, 1931 (Fed. Cir. 2000), “[d]etermining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness” (citing *Tec Air, Inc. v. Denso Mfg.*, 52 USPQ2d 1296, 1297-98 (Fed. Cir. 1999) (stating that the factual underpinnings of obviousness include whether a reference provides a motivation to combine its teachings with another)).

Furthermore, as noted by the Federal Circuit in *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), specific reasons must be shown in the art suggesting a combination of references. (See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“[P]articular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”). The current Office Action not only fails to identify any text in Willis 2004 that would suggest that a person of ordinary skill in the art reading Willis 2004 should read Scheffer, but also fails to identify any portion of Scheffer that suggests that a person reading Scheffer should look at Willis 2004. Because the current Office Action has articulated no proper basis for combining Scheffer with Willis 2004, the rejection of Claims 1-4, 6-8, 12, 14 and 169 over the combination of Scheffer with Willis 2004 is *prima facie* improper.

**b. This rejection is *prima facie* improper because it is based on improper hindsight.**

Because no proper support in the references has been identified for the combination of Scheffer with Willis 2004, it must be assumed that the current Office Action is improperly relying on Applicants’ own disclosure as a basis for combining Scheffer with Willis 2004. Effectively, the combination of Scheffer with Willis 2004 set forth in the current Office Action presupposes the combination of Scheffer with Willis 2004 and then



provides a hindsight justification, found nowhere in the references, for this combination. This hindsight justification is contrary to controlling Federal Circuit precedent in *Cardiac Pacemakers Inc. v. St Jude Medical Inc.*, 72 USPQ2d 1333, 1336 (Fed. Cir 2004) that “Prior knowledge in the field of the invention must be supported by tangible teachings of reference materials, and the suggestion to combine references must not be derived by hindsight from knowledge of the invention itself. See also *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1578-79 [42 USPQ2d 1378] (Fed. Cir. 1997) (“However, the record must provide a teaching, suggestion, or reason to substitute computer-controlled valves for the system of hoses in the prior art. The absence of such a suggestion to combine is dispositive in an obviousness determination.”).

In addition, the current Office Action, in arguing that a person of ordinary skill in the art reading only Willis 2004 would look at Scheffer only cites sections of Scheffer (see the Second Conclusory Statement quoted above). By only citing sections of Scheffer, the current Office Action, once again, presupposes that the person of ordinary skill in the art has improperly relied on the Applicants’ disclosure to combine Scheffer with Willis 2004, rather than looking at what Scheffer teaches or suggests in the absence of the Applicants’ disclosure. Because it is based on improper hindsight, the rejection of Claims 1-4, 6-8, 12, 14 and 169 over the combination of Scheffer and Willis 2004 is *prima facie* improper.

c. **The rejection of Claims 1-4, 6-8, 12, 14 and 169 over Willis 2004 in view of Scheffer should be withdrawn because it is *prima facie* improper.**

In summary, for at least the reasons discussed above, the rejection of Claims 1-4, 6-8, 12, 14 and 169 over the combination of Scheffer with Willis 2004 is *prima facie* improper and should be withdrawn.

2. **The current Office Action has failed to show how the combination of Scheffer with Willis 2004 teaches or suggests all of the features of Claims 1-4, 6-8, 12, 14 and 169.**

a. **The current Office Action must show how all of the claim features are taught or suggested by the cited references.**

The rejection of Claims 1-4, 6-8, 12, 14 and 169 over Willis 2004 in view of Scheffer is *prima facie* improper for additional reasons. As set forth in MPEP § 706.02(j), “To establish a *prima facie* case of obvious[ness] . . . The prior art reference (or references) when combined must teach or suggest *all of the claim limitations* (emphasis added).” As also set forth in 37 C.F.R. 1.104(c)(2), “In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The *pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified*” (emphasis added).

For at least the following reasons, the current Office Action has erroneously ignored these requirements of MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2).

b. **The current Office Action has failed to show where all of the features of Claims 1-4, 6-8, 12, 14 and 169 are taught or suggested.**

Contrary to the requirements of 37 C.F.R. 1.104(c)(2), the current Office Action never properly explains the “pertinence” of Willis 2004 and Scheffer to Claims 1-4, 6-8, 12, 14 and 169. The device of Claims 1-4, 6-8, 12, 14 and 169 comprises a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means. As admitted in the current Office Action, Willis 2004 “fails to teach recursive feedback control means for controlling at least one pulse width using recursive feedback, said pulse width driving said electrode means” (See Office Action, p. 3). . In fact, the current Office Action fails to identify any feature in Willis 2004 or Scheffer, either alone or in combination, that corresponds to a

recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means according to Claim 1.

While the current Office Action cites portions of Willis 2004 that include the terms “electrode”, “light modulating element” and portions of Scheffer that include the terms “electrode”, “recursive”, “feedback”, “pulse width”, *etc.*, it fails to explain how these terms relate to each other within these patents or between these two patents. In addition, the current Office Action fails to identify any feature of Willis 2004 or Scheffer that corresponds to the “recursive feedback control means” of Claim 1, much less that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means, or the device of Claim 1 as a whole. The current Office Action merely cites various scattered sections of Willis 2004 and Scheffer, and improperly leaves it to the Applicants to guess as to which elements in Willis 2004 and Scheffer the current Office Action refers.

Even when the current Office Action cites where particular features of Claims 1-4, 6-8, 12, 14 and 169 are allegedly shown, the cited features cannot be found in the cited sections. For example, the current Office Action states that the “recursive feedback control means for controlling at least one pulse width” can be found in: Figure 12, Figure 6, Col. 10, Lines 13-18, Col. 10, lines 57-61, Col. 10, Lines 22-25, tables 1, 2, 3 Col. 3, Lines 27-30, Figure 11, and Col. 25, line 52 to Col. 26, line 46 (see Office Action, p. 3). But Applicants cannot find the term “recursive feedback control” in the cited figures or in the cited portion of Scheffer. In fact, the term “recursive feedback” does not appear at all in Scheffer.

The current Office Action also fails to identify any term in Scheffer that is equivalent to the term “recursive feedback.” The current Office Action also improperly requires Applicants to guess how the various cited sections of Willis 2004 and/or Scheffer relate to each other, or how the various cited sections of Willis 2004 and/or Scheffer together justify the current Office Action’s allegations. Accordingly, the Office Action has failed to show how Willis 2004 and Scheffer, even in combination, teach or suggest all of the features of Claims 1-4, 6-8, 12, 14 and 169.

c. **The current Office Action has failed to show where particular features of Claims 2-4, 6, 8 and 12 are taught or suggested by the cited references.**

The rejection of each of Claims 2-4, 6, 8 and 12 over Willis 2004 in view of Scheffer is *prima facie* improper because these references, either alone or in combination, fail to teach or suggest the following particular features of these claims (see MPEP § 706.02(j) and 37 C.F.R. § 1.104(c)(2) cited above regarding references teaching/suggesting all claim features).

**Claim 2.** In the device of Claim 2, the recursive feedback is based on an output bit. The current Office Action has failed to identify any element in Willis 2004 or Scheffer, either alone or in combination that corresponds to the recursive feedback being based on an output bit according to Claim 2. While the current Office Action alleges that “Scheffer teaches recursive feedback is based on an output bit” (see Office Action, p. 4), the terms “recursive feedback” and “output bit” do not appear in Scheffer. In fact, the current Office Action has failed to identify any terms in Scheffer that are equivalent to “recursive feedback” and “output bit” according to Claim 2.

**Claims 3 and 4.** Claims 3 and 4 are dependent on Claim 2, and thus must include at least all of the patentable features of Claim. 2. Therefore, the rejection of Claims 3 and 4 based on the combination of Scheffer with Willis 2004 is *prima facie* improper for the same reasons discussed above with respect to Claim 2.

**Claim 3.** In the device of Claim 3, the output bit is a drive output bit. The current Office Action has failed to identify any element in Willis 2004 or Scheffer, either alone or in combination that corresponds to the drive output bit of Claim 3. While the current Office Action alleges that Scheffer teaches “a [sic] output bit is a drive output bit” (see Office Action, p. 4), the terms “output bit” and “drive output bit” do not appear in Scheffer. In fact, the current Office Action has failed to identify

any term in Scheffer that is equivalent to the “output bit” and especially “drive output bit” according to Claim 3.

**Claim 4.** In the device of Claim 4, the output bit is an intermediate output bit. The current Office Action has failed to identify any element in Willis 2004 or Scheffer, either alone or in combination that corresponds to an output bit according to Claim 4. While the current Office Action alleges that Scheffer teaches “a [sic] output bit is an intermediate output bit” (see Office Action, p. 4), the terms “output bit” and “intermediate output bit” do not appear in Scheffer. In fact, the current Office Action has failed to identify any terms in Scheffer that are equivalent to “output bit” and “intermediate output bit” according to Claim 4.

**Claim 6.** The device of Claim 6 includes a panel interface controller, the panel interface controller further including said recursive feedback control means. However, the current Office Action has failed to identify any element in Willis 2004 or Scheffer, either alone or in combination that corresponds to a panel interface controller and especially a panel interface controller that includes said recursive feedback control means. While the current Office Action alleges that Scheffer teaches a panel interface controller (see Office Action, p. 5), the terms “recursive feedback”, “panel interface controller”, or even “interface controller” do not appear in Scheffer. In fact, the current Office Action has failed to identify any terms in Willis 2004 or Scheffer that are equivalent to a “recursive feedback control means” or to a “panel interface controller”, much less equivalent to a panel interface controller that includes a recursive feedback control means according to Claim 6.

**Claim 12.** In the device of Claim 12, the at least one pulse width comprises at least two pulse widths. However, the current Office Action has failed to identify any element in Willis 2004 or Scheffer, either alone or in combination, that corresponds to a device wherein the at least one pulse width comprises at least two pulse widths. While the current Office Action alleges that “Scheffer . . . teaches pulse width comprises at least two pulse widths” (see Office Action, p. 5), the term “two pulse

widths” does not appear in Scheffer. In fact, the current Office Action has failed to identify any terms in Willis 2004 or Scheffer that are equivalent to “two pulse widths” according to Claim 12.

**Claims 2-4, 6 and 12.** As discussed with the Examiner during the October 13, 2005 Interview regarding the prior rejections each of Claims 2-4, 6 and 12 over Scheffer, the prior Office Actions merely cite various scattered sections of Scheffer and improperly leave it to the Applicants to guess as to which elements in Scheffer are being referred to. The current Office Action also forces Applicants to improperly speculate on how the various cited sections of Willis 2004 and/or Scheffer relate to each other, or how the various cited sections of Willis 2004 and/or Scheffer together justify the current Office Action’s assertions. Because of specificity required by MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2), the lack of specificity in the current Office Action in rejecting each of Claims 2-4, 6 and 12 is *prima facie* improper.

3. **The rejection of Claims 1-4, 6-8, 12, 14 and 169 over the combination of Scheffer with Willis 2004 is *prima facie* improper and should be withdrawn.**

For at least the reasons discussed above, the rejection of Claims 1-4, 6-8, 12, 14 and 169 in the current Office Action over Willis 2004 in view of Scheffer should be withdrawn.

D. **Response to Rejection of Claims 5 and 9 under 35 U.S.C. § 103(a) as being as being unpatentable over Willis 2004 in view of Scheffer and further in view of Dallas.**

At Section 5 of the Office Action, Claims 5 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Willis 2004 in view of Scheffer as applied to Claims 1-4, 6-8, 12, 14 and 169, and further in view of U.S. Patent Application No. 2004-0263502 to Dallas (Dallas). This rejection is respectfully traversed.

**1. The combination of Scheffer with Willis 2004 is *prima facie* improper.**

**a. This rejection provides no appropriate basis for combining Scheffer with Willis 2004.**

Claims 5 and 9 depend from Claim 1. For reasons discussed above, the rejection of Claim 1 over Willis 2004 in view of Scheffer is *prima facie* improper. Accordingly, the rejection of Claims 5 and 9 over the combination of Dallas with Willis 2004 and Scheffer must also *prima facie* improper for the same reasons.

**b. This rejection provides no appropriate basis for combining Dallas with Scheffer and Willis 2004.**

The current Office Action has also provided no proper motivation for combining Dallas with Scheffer and Willis 2004 in rejecting Claims 5 and 9 (See MPEP § 706.02(j) and the cited cases and relevant text discussed in Section C(1) above regarding “motivation to combine references.”).

In rejecting Claims 5 and 9, the current Office Action attempts to justify combining Dallas with Scheffer and Willis 2004 based on the following two conclusory statements:

**First Conclusory Statement**

In order to achieve applicant’s claimed invention one in the [sic] ordinary skill in the art would be motivated to combine Willis teaching of LCOS light modulating element driving and Schafer [sic] et al. ‘s teaching of recursive feedback circuitry with Dallas et al. teaching of LCOS with silicon backplane able to have various circuitry such that Shafer’s [sic] recursive feedback circuitry could be implemented on Dallas silicon [sic] backplane (see Office Action, p. 7).

**Second Conclusory Statement**

Thus it would have been obvious to one in the [sic] ordinary skill in the art at the time of invention was made to incorporate the teaching of Dallas et al. in to [sic] the teaching of Willis modified by Scheffer et al. to be able to implement on Dallas et al. LCOS (page 7, paragraph 75, Lines 9-11)

silicone [sic] backplane the circuitry (page 8, paragraphs 81, Lines 4-6, paragraph 82, Lines 1-4, 7-14, paragraph 83, Lines 1-4; (of Schafer's [sic] et al.'s) to control pulse width (col. 25, Line 52 to col. 26 Line 46) using recursive feedback circuitry (figure 6, Col. 10, Lines 13-18, 57-61) (see Office Action, p. 7).

The Second Conclusory Statement fails to properly identify any text in Dallas, Willis 2004, Scheffer or any other reference that would provide any motivation for combining Scheffer with Willis 2004. The First Conclusory Statement does not even attempt to cite any portion of Dallas, Willis 2004, Scheffer, or any other reference in support of its allegations. Accordingly, the combination of Dallas with Scheffer and Willis is *prima facie* improper. (See MPEP § 706.02(j) and the cited cases and relevant text discussed in Section C(1) above regarding "motivation to combine references).

c. **This rejection is *prima facie* improper because it is based on improper hindsight.**

Because no proper support in the references has been identified for the combination of Dallas with Scheffer and Willis 2004, it must be assumed that the current Office Action is improperly relying on Applicants' own disclosure as a basis for combining Dallas with Scheffer and Willis 2004. Effectively, the combination of Dallas with Scheffer and Willis 2004 set forth in the Office Action presupposes the combination of Dallas with Scheffer and Willis 2004 and then provides a hindsight justification, found nowhere in the references, for this combination. As repeatedly held by the Federal Circuit (see cases cited in Section (C)(1)(b) above), the motivation for combining references may not be based on a hindsight use of an applicant's disclosure. In addition, the current Office Action, in arguing that a person of ordinary skill in the art reading only Scheffer and Willis 2004 would look at Dallas only cites sections of Dallas (see Second Conclusory Statement quoted above). By only citing sections of Dallas, the current Office Action, once again, presupposes that the person of ordinary skill in the art has improperly relied on the Applicants' disclosure to combine Dallas with Scheffer and Willis, rather than looking at what Scheffer and Willis teach or suggest in the absence of the Applicants' disclosure. Because it is based on improper hindsight, the rejection of Claims 5 and 9 over the combination of Scheffer and Willis 2004 is *prima facie* improper.



- c. **The rejection of Claims 5 and 9 over the combination Scheffer and Willis 2004 in view of Dallas should be withdrawn because it is *prima facie* improper.**

In summary, for at least the reasons discussed above, the rejection of Claims 5 and 9 over the combination of Dallas with Scheffer and Willis 2004 is *prima facie* improper and should be withdrawn.

2. **The current Office Action has failed to show how the combination of Dallas with Scheffer and Willis 2004 teaches or suggests all of the features of Claims 5 and 9.**

- a. **The current Office Action must show how all of the claim features are taught or suggested by the cited references.**

The rejection of Claims 5 and 9 over Scheffer and Willis 2004 in view of Dallas is *prima facie* improper for additional reasons. The requirements MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2) are set forth above in Section C(2)(a). For at least the following reasons, the current Office Action has erroneously ignored these requirements of MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2).

- b. **The current Office Action has failed to show where all of the features of Claims 5 and 9 are taught or suggested.**

- i. **The current Office Action fails to show where all of the features of Claims 5 and 9 are taught or suggested by the combination of Scheffer with Willis 2004.**

Contrary to the requirements of 37 C.F.R. 1.104(c)(2), the current Office Action never properly explains the “pertinence” of Willis 2004 and Scheffer to Claims 5 or 9. Claims 5 and 9 depend from Claim 1, and, therefore, include all of the patentable features

of Claim 1, as well as additional patentable features. For the reasons discussed above in Section C(2)(b), the current Office Action has failed to show where Willis 2004 teaches Claim 1's feature of a "recursive feedback control means for controlling at least one pulse width using recursive feedback, said pulse width driving said electrode means". In fact, the current Office Action has failed to identify any feature in Willis 2004 or Scheffer, either alone or in combination, that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means according to Claim 1.

While the current Office Action cites portions of Willis 2004 that include the terms "electrode", "light modulating element" and portions of Scheffer that include the terms "electrode", "recursive", "feedback", "pulse width", *etc.*, it fails to explain how these terms relate to each other within these patents or between these two patents. In addition, the current Office Action fails to identify any feature of Willis 2004 or Scheffer that corresponds to the "recursive feedback control means" of Claim 1, much less that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means, or the device of claim 1 as a whole. The current Office Action merely cites various scattered sections of Willis 2004 and Scheffer, and improperly leaves it to the Applicants to guess as to which elements in Willis 2004 and Scheffer the current Office Action refers..

As discussed above in Section C(2)(b) with respect to Claim 1, even when the current Office Action cites where particular features of Claim 1 are allegedly shown, the cited features cannot be found in the cited sections. The current Office Action fails to identify any term in Scheffer that is equivalent to the term "recursive feedback." The current Office Action also improperly requires Applicants to guess how the various cited sections of Willis 2004 and/or Scheffer relate to each other, or how the various cited sections of Willis 2004 and/or Scheffer together justify the current Office Action's allegations. Accordingly, the Office Action has failed to show how Willis 2004 and Scheffer, even in combination, teach or suggest all of the features of Claim 1, shared by Claims 5 and 9 which depend from Claim 1.

ii. **The current Office Action fails to show where all of the features of Claims 5 and 9 are taught or suggested by the combination of Dallas with Scheffer and Willis 2004.**

Dallas is only cited for allegedly teaching the feature of a silicon backplane having various driving circuitry (see Office Action, page 7). Dallas cannot remedy the deficiencies of the combination of Scheffer and Willis 2004, which fails to teach the features of Claims 5 and 9 discussed above in Section D(2)(b)(i) such as “recursive feedback control means,” “pulse width,” *etc.* Accordingly, the Office Action has failed to show how the combination of Dallas with Scheffer and Willis 2004, teaches or suggests all of the claimed features of Claims 5 and 9.

c. **The current Office Action has failed to show where particular features of Claim 5 are taught or suggested by the cited references.**

The rejection of Claim 5 over Dallas with Scheffer and Willis 2004 is *prima facie* improper because these references, either alone or in combination, fail to teach or suggest the following particular features of this Claim (see MPEP § 706.02(j) and 37 C.F.R. § 1.104(c)(2) cited above regarding references teaching/suggesting all of the features of a claim). The device of claim 5 includes a backplane, including a recursive feedback control means. However, the Office Action fails to identify any element in Dallas, Scheffer and Willis 2004, either alone or in combination, that corresponds to a recursive feedback control means, much less a backplane that includes a recursive feedback control means, according to Claim 5. While the Office Action alleges that Scheffer teaches a recursive feedback control means (see Office Action, p. 7), the term “recursive feedback control” does not appear in Scheffer. In fact, the Office Action has failed to identify any term in Scheffer that is equivalent to “recursive feedback control means”, much less equivalent to a backplane that includes a recursive feedback control means according to Claim 5.

**E. Response to rejection of Claims 10, 11 and 13 under 35 U.S.C. § 103(a) as being as being unpatentable over Willis 2004 in view of Scheffer and further in view of Willis 2003.**

At Section 6 of the Office Action, Claims 10, 11 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Willis 2004 in view of Scheffer as applied to Claims 1-4, 6-8, 12, 14 and 169, and further in view of U.S. Patent Application No. 2003-0156083 to Willis (Willis 2003). This rejection is respectfully traversed.

1. **The combination of Scheffer with Willis 2004 is *prima facie* improper.**
  - a. **This rejection provides no appropriate basis for combining Scheffer with Willis 2004.**

Claims 10, 11 and 13 depend from Claim 1. For reasons discussed above, the rejection of Claim 1 over Willis 2004 in view of Scheffer is *prima facie* improper. Accordingly, the rejection of Claims 10, 11 and 13 over the combination of Willis 2003 with Willis 2004 and Scheffer must also *prima facie* improper for the same reasons.

- b. **This rejection provides no appropriate basis for combining Willis 2003 with Scheffer and Willis 2004.**

The current Office Action has also provided no proper motivation for combining Willis 2003 with Scheffer and Willis 2004 in rejecting Claims 10, 11 and 13 (See MPEP § 706.02(j) and the cited cases and relevant text discussed in Section C(1) above regarding “motivation to combine references.”).

In rejecting Claims 10, 11 and 13, the current Office Action attempts to justify combining Willis 2003 with Scheffer and Willis 2004 based on the following two conclusory statements:

**First Conclusory Statement**

In order to achieve applicant's claimed invention one in the [sic] ordinary skill in the art would be motivated to combine Willis (US 2004/0036707) teaching of LCOS light modulating element driving and Schafer [sic] et al. 's teaching of recursive feedback circuitry with Willis (US 2003/0156083) teaches explicit and implicit able to have various circuitry such that Shafer's [sic] recursive feedback circuit could be implemented on with Willis (US 2003/0156083) explicit and implicit teaching (see Office Action, p. 8).

**Second Conclusory Statement**

Thus it would have been obvious to one in the [sic] ordinary skill in the art at the time of invention was made to incorporate the teaching of Willis (US 2003/0156083) in to [sic] the teaching of Willis (US 2004/0036707 A1) modified by Scheffer et al. to be able to implement on Willis (US 2003/0156083) teaching of explicit and implicit per applicant's specification (figures 3,4, page 1, paragraphs 15,16, page 2, paragraphs 16-20); (of Schafer's [sic] et al.'s) to control pulse width (Col. 25, Line 52 to Col. 26 Line 46) using recursive feedback circuitry (figure 6, Col. 10, Lines 13-18, 57-61) (see Office Action, pp. 8-9).

The Second Conclusory Statements fails to properly identify any text in Willis 2003, Willis 2004, Scheffer or any other reference that would provide any motivation for combining Scheffer with Willis 2004. The First Conclusory Statement does not even attempt to cite any portion of Willis 2003, Willis 2004, Scheffer, or any other reference in support of its allegations. Accordingly, the combination of Willis 2003 with Scheffer and Willis is *prima facie* improper. (See MPEP § 706.02(j) and the cited cases and relevant text discussed in Section C(1) above regarding "motivation to combine references).

**c. This rejection is *prima facie* improper because it is based on improper hindsight.**

Because no proper support in the references has been identified for the combination of Willis 2003 with Scheffer and Willis 2004, it must be assumed that the current Office Action is improperly relying on Applicants' own disclosure as a basis for combining Scheffer with Willis 2004. Effectively, the combination of Willis 2003 with Scheffer and Willis 2004 set forth in the current Office Action presupposes the combination of Willis

2003 with Scheffer and Willis 2004 and then provides a hindsight justification, found nowhere in the references, for this combination. As repeatedly held by the Federal Circuit (see cases cited in Section (C)(1)(b) above), the motivation for combining references may not be based on a hindsight use of an applicant's disclosure. In addition, the current Office Action, in arguing that a person of ordinary skill in the art reading only Scheffer and Willis 2004 would look at Willis 2003 only cites sections of Willis 2003 (see Second Conclusory statement quoted above). By only citing sections of Willis 2003, the current Office Action, once again, presupposes that the person of ordinary skill in the art has improperly relied on the Applicants' disclosure to combine Willis 2003 with Scheffer and Willis 2004, rather than looking at what Scheffer and Willis 2004 teach or suggest in the absence of the Applicants' disclosure. Because it is based on improper hindsight, the rejection of Claims 10, 11 and 13 over the combination of Willis 2003 with Scheffer and Willis 2004 is *prima facie* improper.

- d. **The rejection of Claims 10, 11 and 13 over the combination Scheffer and Willis 2004 in view of Scheffer should be withdrawn because it is *prima facie* improper.**

In summary, for at least the reasons discussed above, the rejection of Claims 10, 11 and 13 over the combination of Willis 2003 with Scheffer and Willis 2004 is *prima facie* improper and should be withdrawn.

2. **The current Office Action has failed to show how the combination of Willis 2003 with Scheffer and Willis 2004 teaches or suggests all of the features of Claims 10, 11 and 13.**

- a. **The current Office Action must show how all of the claim features are taught or suggested by the cited references.**

The rejection of Claims 10, 11 and 13 over Scheffer and Willis 2004 in view of Willis 2003 is *prima facie* improper for additional reasons. The requirements MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2) are set forth above in Section C(2)(a). For at least the

following reasons, the current Office Action has erroneously ignored these requirements of MPEP § 706.02(j) and 37 C.F.R. 1.104(c)(2).

- b. **The current Office Action has failed to show where all of the features of Claims 10, 11 and 13 are taught or suggested.**
- i. **The current Office Action fails to show where all of the features of Claims 10, 11 and 13 are taught or suggested by the combination of Scheffer with Willis 2004.**

Contrary to the requirements of 37 C.F.R. 1.104(c)(2), the current Office Action never properly explains the “pertinence” of Willis 2004 and Scheffer to Claims 10, 11 or 13. Claims 10, 11 and 13 depend from Claim 1, and, therefore, include all of the features of Claim 1 as well as additional patentable features. For the reasons discussed above in Section C(2)(b), the current Office Action has failed to show where Willis 2004 teaches Claim 1’s feature of a “recursive feedback control means for controlling at least one pulse width using recursive feedback, said pulse width driving said electrode means”. In fact, the current Office Action has failed to identify any feature in Willis 2004 or Scheffer, either alone or in combination, that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means according to Claim 1.

While the current Office Action cites portions of Willis 2004 that include the terms “electrode”, “light modulating element” and portions of Scheffer that include the terms “electrode”, “recursive”, “feedback”, “pulse width”, *etc.*, it fails to explain how these terms relate to each other within these patents or between these two patents. In addition, the current Office Action fails to identify any feature of Willis 2004 or Scheffer that corresponds to the “recursive feedback control means” of Claim 1, much less that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means, or the device of Claim 1 as a whole. The current Office Action merely cites various scattered sections of Willis 2004 and Scheffer, and improperly leaves it to the Applicants to guess as to which elements in Willis 2004 and Scheffer the current Office Action refers..

As discussed above in Section C(2)(b) with respect to Claim 1, even when the current Office Action cites where particular features of Claim 1 are allegedly shown, the cited features cannot be found in the cited sections. The current Office Action fails to identify any term in Scheffer that is equivalent to the term “recursive feedback.” The current Office Action also improperly requires Applicants to guess how the various cited sections of Willis 2004 and/or Scheffer relate to each other, or how the various cited sections of Willis 2004 and/or Scheffer together justify the current Office Action’s allegations. Accordingly, the Office Action has failed to show how Willis 2004 and Scheffer, even in combination, teach or suggest all of the features of Claims 1 shared by Claims 10, 11 and 13, which depend from Claim 1.

ii. **The current Office Action fails to show where all of the features of Claims 10, 11 and 13 are taught or suggested by the combination of Willis 2003 with Scheffer and Willis 2004.**

Willis 2003 is only cited for allegedly teaching the features of “explicit and implicit . . . per old and news [sic] pixel values” (see Office Action, p. 8). Willis 2003 cannot remedy the deficiencies of the combination of Scheffer and Willis 2003, which fails to teach the features of Claims 10, 11 and 13 discussed above in Section D(2)(b)(i) such as “recursive feedback control means,” “pulse width,” *etc.* Accordingly, the Office Action has also failed to show how the combination of Willis 2003 with Scheffer and Willis 2004 teaches or suggests all of the claimed features of Claims 10, 11 and 13.

c. **The current Office Action has failed to show where particular features of Claims 10, 11 and 13 are taught or suggested by the cited references.**

The rejection of Claims 10, 11 and 13 over each of Willis 2003 with Scheffer and Willis 2004 is *prima facie* improper because these references, either alone or in combination, fail to teach or suggest the for the following particular features of Claims 10, 11 and 13 (see MPEP § 706.02(j) and 37 C.F.R. § 1.104(c)(2) cited above regarding references teaching/suggesting all of the features of a claim).



**Claim 10.** Claim 10 claims a device wherein the recursive feedback is explicit recursive feedback. However, the current Office Action has failed to identify any element in Willis 2003, Scheffer and Willis 2004, either alone or in combination, that corresponds to explicit recursive feedback according to Claim 10. The Office Action has merely noted the term “explicit” is used in Willis 2003 (see Office Action, page 8) and has not shown why the term “explicit” in Willis 2003 is equivalent to the explicit recursive feedback of Claim 10.

**Claim 11.** Claim 11 claims a device wherein the recursive feedback is implicit recursive feedback. However, the Office Action has failed to identify any element in Willis 2003, Scheffer and Willis 2004, either alone or in combination, that corresponds to implicit recursive feedback according to Claim 11. The Office Action has merely noted the term “implicit” is used in Willis 2003 (see Office Action, page 8) and has not shown why the term “implicit” in Willis 2003 is equivalent to the implicit recursive feedback of Claim 11.

**Claim 13.** Claim 13 claims a device wherein the device includes a plurality of pixel value bits for controlling a pixel value of the pulse width and wherein the recursive feedback control means only uses some of said pixel value bits to determine a next state of said pulse width. However, the current Office Action has failed to identify any element in Willis 2003, Scheffer and Willis 2004, either alone or in combination, that corresponds to “pulse width,” “recursive feedback control means,” “controlling pixel value of the pulse width,” *etc.*, according to Claim 13. While the Office Action alleges that “Scheffer et al. teaches pixel value bits for controlling a pixel value” (see Office Action, p. 9), the term “pixel value,” much less “pixel value bit” is nowhere to be found in Scheffer.

**F. The Current Office Action Repeatedly Fails to Address Applicants' Arguments.**

At Section 10, the current Office Action alleges that it responds to Applicants' arguments (see Office Action, pages 10-11). But as discussed above in Section A, the current Office Action has, instead, *repeatedly* failed to address Applicants' arguments as to why prior Office Actions, or the current Office Action, fail to comply with the requirements of 37 C.F.R. 104(c)(2).

**G. Claims 1-14 and 169 have been Rejected based on Facts within the Personal Knowledge of the Examiner, and, therefore, Applicants Request that the Examiner provide an Affidavit/Declaration under 37 C.F.R. § 104(d)(2).**

**1. The grounds alleged in current Office Action's for rejecting Claims 1-14 and 169 appear not to be based on what is taught by the cited references relied on, but instead on facts within the personal knowledge of the Examiner.**

While the Examiner alleges that Claims 1-14 and 169 have been rejected by the Examiner based on what is allegedly taught by the cited references, Applicants' discussion in Sections C through E above suggests otherwise. Rather, the rejection of Claims 1-14 and 169 by the Examiner appears to be based not on what is taught by the cited references, but instead on the basis of facts within the personal knowledge of the Examiner.

**a. The failure of the Examiner to identify in Scheffer and/or Willis a proper basis for combining Scheffer with Willis 2004 suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Sections C, D and E, Claims 1-14 and 169 have all been rejected by the Examiner over the combination of Scheffer with Willis 2004 or the

combination of Scheffer with Willis 2004 in view of either Dallas or Willis 2003. As also discussed above in Sections C(1)(a), D(1)(a) and E(1)(a), the Examiner has failed to identify in Scheffer and/or Willis 2004 a proper basis for this combination of references. This failure to identify a proper basis for this combination of references suggests that this combination is actually based on facts within the personal knowledge of the Examiner.

- b. **The failure of the Examiner to identify all of the claimed features of Claims 1-14 and 169 in the cited references suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Section C(2)(b) above, the Examiner has admitted that Willis 2004 “fails to teach recursive feedback control means for controlling at least one pulse width using recursive feedback, said pulse width driving said electrode means” according to Claim 1 (See Office Action, p. 3). In addition, the Examiner has failed to identify any feature in Willis 2004 or Scheffer, either alone or in combination, that corresponds to a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means according to Claim 1. Even when the Examiner cites where particular features of Claims 1-14 and 169 are allegedly shown, these cited features cannot be found in the cited sections. In fact, the Examiner fails to show where various specific features of Claims 2-4, 6, 8 and 12 are taught or suggested in Willis 2004 and/or Scheffer. Such failure suggests that this rejection of Claims 1-14 and 169 over Willis 2004 and Scheffer is based not on what is taught by these references, but instead on facts within the personal knowledge of the Examiner.

2. The specific grounds alleged in Examiner for rejecting claims 5 and 9 also appear not to be based on what is taught by the cited references relied on, but instead on facts within the personal knowledge of the Examiner.

While the Examiners alleges that Claims 5 and 9 have been rejected based on what is taught by Dallas, Scheffer and/or Willis 2004, Applicants discussion in Section D suggests otherwise. Rather, the rejection of Claims 5 and 9 by the Examiner also appears to be based not on what is taught by the cited references, but instead on the basis of facts within the personal knowledge of the Examiner.

- a. The failure of the Examiner to identify in Dallas, Scheffer and/or Willis 2004 a proper basis for combining Dallas with Scheffer and/or Willis 2004 suggests this combination of references is based upon facts within the personal knowledge of the Examiner.

As discussed above in Section D, Claims 5 and 9 have all been rejected by the Examiner over the combination of Dallas with Scheffer and Willis 2004. As discussed in Section D(1)(b) above, the Examiner has failed to identify in Dallas, Scheffer and/or Willis 2004 a proper basis for this combination of references. This failure to identify a proper basis for this combination of references suggests that this combination is actually based on facts within the personal knowledge of the Examiner.

- b. The failure of the Examiner to identify all of the claimed features of Claims 5 and 9 in the cited references suggests this combination of references is based upon facts within the personal knowledge of the Examiner.

As further discussed above in Section D(2)(b)(i), Willis 2004 and Scheffer, even in combination, fail to teach or suggest all of the features of Claims 5 and 9, including Claim 5's and Claim 9's claimed feature of a recursive feedback control means for controlling at

least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means. Dallas, which is only cited for allegedly teaching the feature of a silicon backplane having various driving circuitry (see Office Action, p. 7), cannot remedy these deficiencies in the combination of Scheffer and Willis 2003. Such failure suggests that this rejection of Claims 5 and 9 over Willis 2004 and/or Scheffer, in view of Dallas, is based not on what is taught by these references, but instead on facts within the personal knowledge of the Examiner.

- c. **The failure of the Examiner to identify where particular features of Claim 5 are taught or suggested by the cited references further suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Section D(2)(b)(ii) above, the Examiner has failed to identify any element in Dallas, Scheffer and Willis 2004, either alone or in combination, that corresponds to a backplane that includes a recursive feedback control means, according to Claim 5. Such failure further suggests that this rejection of Claim 5 over Willis 2004 and/or Scheffer, in view of Dallas, is based not on what is taught by these references, but instead on facts within the personal knowledge of the Examiner.

3. **The specific grounds in Examiner for rejecting Claims 10, 11 and 13 are based on facts within the personal knowledge of the Examiner.**

While the Examiners alleges that Claims 10, 11 and 13 have been rejected based on what is taught by Willis 2003, Scheffer and/or Willis 2004, Applicants discussion in Section E suggests otherwise. Rather, the rejection of Claims 10, 11 and 13 by the Examiner also appears to be based not on what is taught by the cited references, but instead on the basis of facts within the personal knowledge of the Examiner.

- a. **The failure of the Examiner to identify in Willis 2003, Scheffer and/or Willis 2004 a proper basis for combining Willis 2003 with Scheffer and/or Willis 2004 suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Section E, Claims 10, 11 and 13 have all been rejected by the Examiner over the combination of Willis 2003 with Scheffer and Willis 2004. As discussed in Section E(1)(b) above, the Examiner has failed to identify in Willis 2003, Scheffer and/or Willis 2004 a proper basis for this combination of references. This failure to identify a proper basis for this combination of references suggests that this combination is actually based on facts within the personal knowledge of the Examiner.

- b. **The failure of the Examiner to identify all of the claimed features of Claims 10, 11 and 13 in the cited references suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Section E(1)(b), Willis 2004 and Scheffer, even in combination, fail to teach or suggest all of the features of Claims 10, 11 and 13, including Claim 1's feature of a recursive feedback control means for controlling at least one pulse width using recursive feedback wherein the pulse width is used to drive an electrode means. Willis 2003, which is only cited for allegedly teaching the features of "explicit and implicit . . . per old and news [sic] pixel values" (see Office Action, p. 8), cannot remedy these deficiencies in the combination of Scheffer and Willis 2004. Such failure suggests that this rejection of Claims 5 and 9 over Scheffer and Willis 2004, in view of Willis 2003, based not on what is taught by these references, but instead on facts within the personal knowledge of the Examiner.

- c. **The failure of the Examiner to identify where particular features of Claims 10, 11 and 13 are taught or suggested by the cited references suggests this combination of references is based upon facts within the personal knowledge of the Examiner.**

As discussed above in Section E(2)(c), the Examiner has failed to identify any element in Willis 2003, Scheffer and Willis 2004, either alone or in combination, that corresponds to particular features of Claims 10, 11 and 13. Specifically, the Examiner has failed to identify an element in Willis 2003, Scheffer or Willis 2004, either alone or in combination, that corresponds to: (1) explicit recursive feedback according to Claim 10; (2). implicit recursive feedback according to Claim 11; or (3) "pulse width," "recursive feedback control means," "controlling pixel value of the pulse width," *etc.*, according to Claim 13. Such failure further suggests that this rejection of Claims 10, 11 and 13 over Scheffer and/or Willis 2004, in view of Willis 200 is based not on what is taught by these references, but instead on facts within the personal knowledge of the Examiner .

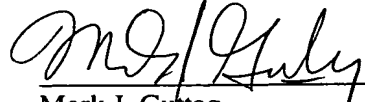
4. **Applicants request that the Examiner either: (a) provide an Affidavit/Declaration under 37 C.F.R. § 1.104(d)(2), or (b) withdraw the rejections of Claims 1-14 and 169.**

For at least the above reasons, Claims 1-14 and 169 have been rejected on the basis of facts within the personal knowledge of the Examiner. Accordingly, under 37 C.F.R. § 1.104(d)(2), the Applicants hereby request that the Examiner either: (a) provide affidavit(s) or declaration(s) that contain facts supporting each of the Examiner's unsupported assertions used as a basis for the rejections of Claims 1-14 and 169 or, (b) withdraw the rejections of Claims 1-14 and 169.

If the Examiner has any questions or concerns regarding the present response, the Examiner is invited to contact Mark J. Gutttag at 703-591-2664, Ext. 2006.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance, and favorable action is respectfully solicited.

Respectfully submitted,

  
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